

CLAIMS AMENDMENT

Claim 1 (Canceled).

Claim 2 (Canceled).

Claim 3 (Canceled).

Claim 4 (Canceled).

Claim 5 (Canceled).

Claim 6 (Canceled).

Claim 7 (Canceled).

Claim 8 (Canceled).

Claim 9 (Canceled).

Claim 10 (Currently amended). A test kit useful for detecting a polynucleotide in a test sample, said test kit comprising a container containing at least one polynucleotide having at least ~~50%~~ 85% identity with a sequence selected from the group consisting of ~~SEQUENCE ID NOS: 4-16~~ 15 and 16, and fragments or complements thereof, wherein said fragments have a length of at least ~~40~~ 15 nucleotides.

Claim 11 (Currently amended). A purified polynucleotide ~~or fragment thereof~~ having at least ~~50%~~ 85% identity with a sequence selected from the group consisting of ~~SEQUENCE ID NOS: 4-16~~ 15 and 16, and fragments or

complements thereof, wherein said fragments have a length of at least ~~40~~ 15 nucleotides.

Claim 12 (Original). The purified polynucleotide of claim 11, wherein said polynucleotide is produced by recombinant techniques.

Claim 13 (Original). The purified polynucleotide of claim 11, wherein said polynucleotide is produced by synthetic techniques.

Claim 14 (Previously presented). The purified polynucleotide of claim 11, wherein said polynucleotide comprises a sequence encoding at least one epitope.

Claim 15 (Currently amended). A recombinant expression system comprising a nucleic acid sequence that includes an open reading frame operably linked to a control sequence compatible with a desired host, wherein said nucleic acid sequence has at least ~~50%~~ 85% identity with a sequence selected from the group consisting of SEQUENCE ID NOS: ~~1-16~~ 15 and 16, and fragments or complements thereof, wherein said fragments have a length of at least ~~40~~ 15 nucleotides.

Claim 16 (Original). A cell transfected with the recombinant expression system of claim 15.

Claim 17 (Canceled).

Claim 18 (Canceled).

Claim 19 (Canceled).

Claim 20 (Canceled).

Claim 21 (Canceled).

Claim 22 (Canceled).

Claim 23 (Withdrawn). An assay kit for determining the presence of PS108 antigen in a test sample, comprising a container containing an antibody which specifically binds to a PS108 antigen which comprises at least one PS108 epitope.

Claim 24 (Withdrawn). The kit of claim 23, wherein said antibody is attached to a solid phase.

Claim 25 (Withdrawn). A method of producing a polypeptide comprising at least one PS108 epitope, said method comprising incubating host cells that have been transfected with an expression vector containing a polynucleotide sequence encoding a polypeptide, wherein said polypeptide comprises an amino acid sequence having at least 50% identity with an amino acid sequence selected from the group consisting of SEQUENCE ID NO 36, SEQUENCE ID NO 37, SEQUENCE ID NO 38, SEQUENCE ID NO 39, and fragments thereof.

Claim 26 (Withdrawn). A method for detecting PS108 antigen in a test sample suspected of containing said PS108 antigen, comprising:

(a) contacting the test sample with an antibody or fragment thereof which specifically binds to at least one epitope of a PS108 antigen selected from the group consisting of SEQUENCE ID NO 36, SEQUENCE ID NO 37, SEQUENCE ID NO 38, SEQUENCE ID NO 39, and fragments thereof, wherein said contacting is carried out for a time and under conditions sufficient for the formation of antibody/antigen complexes; and

(b) detecting the presence of said complexes as an indication of the presence of said PS108 antigen.

Claim 27 (Withdrawn). The method of claim 26, wherein said antibody is attached to a solid phase.

Claim 28 (Withdrawn). A method for detecting the presence of antibodies specific for a PS108 antigen in a test sample suspected of containing such antibodies, said method comprising:

- (a) contacting the test sample with a PS108 polypeptide, wherein said PS108 polypeptide contains at least one PS108 epitope derived from an amino acid sequence or fragment thereof having at least 50% identity with an amino acid sequence selected from the group consisting of SEQUENCE ID NO 36, SEQUENCE ID NO 37, SEQUENCE ID NO 38, SEQUENCE ID NO 39, and fragments thereof, and further wherein said contacting is carried out for a time and under conditions sufficient to allow antigen/antibody complexes to form; and
- (b) detecting the presence of said complexes as an indication of the presence of said antibodies.

Claim 29 (Withdrawn). The method of claim 28, wherein said PS108 polypeptide is attached to a solid phase.

Claim 30 (Withdrawn). A cell transfected with a nucleic acid sequence encoding at least one PS108 epitope, wherein said nucleic acid sequence is selected from the group consisting of SEQUENCE ID NOS 1-16, and fragments or complements thereof.

Claim 31 (Withdrawn). A method for producing antibodies which specifically bind to PS108 antigen, comprising administering to an individual an isolated immunogenic polypeptide or fragment thereof in an amount sufficient to elicit an immune response, wherein said immunogenic polypeptide comprises at least one PS108 epitope and has at least 50% identity with a sequence selected from the group consisting of SEQUENCE ID NO 36, SEQUENCE ID NO 37, SEQUENCE ID NO 38, SEQUENCE ID NO 39, and fragments thereof.

Claim 32 (Withdrawn). A method for producing antibodies which specifically bind to PS108 antigen, comprising administering to an individual a plasmid comprising a sequence which encodes at least one PS108 epitope derived from a polypeptide having an amino acid sequence selected from the group consisting of SEQUENCE ID NO 36, SEQUENCE ID NO 37, SEQUENCE ID NO 38, SEQUENCE ID NO 39, and fragments thereof.

Claim 33 (Currently amended). A composition of matter comprising a polynucleotide or ~~fragment thereof~~, wherein said polynucleotide has at least ~~50%~~ 85% identity with a polynucleotide selected from the group consisting of SEQUENCE ID NOS: ~~4-16~~ 15 and 16, and fragments or complements thereof, wherein said fragments have a length of at least ~~40~~ 15 nucleotides.

Claim 34 (Withdrawn). A composition of matter comprising a polypeptide containing at least one PS108 epitope, wherein said polypeptide has at least 50% identity with a sequence selected from the group consisting of SEQUENCE ID NO 36, SEQUENCE ID NO 37, SEQUENCE ID NO 38, SEQUENCE ID NO 39, and fragments thereof.

Claim 35 (Original). A test kit of claim 10 further comprising a container with tools useful for collection of said sample, wherein the tools are selected from the group consisting of lancets, absorbent paper, cloth, swabs and cups.

Claim 36 (Canceled).

Claim 37 (Canceled).

Claim 38 (Currently amended). A polynucleotide that codes for a protein comprising an amino acid sequence having at least ~~50%~~ 85% identity to SEQUENCE ID NO: 36.

Claim 39 (Currently amended). A polynucleotide comprising DNA having at least ~~50%~~ 85% identity with ~~SEQUENCE ID NO: 15 or SEQUENCE ID NO:16~~.